

XFM50-DVDA-F1X1N

3G SDI Single Channel Distribution Amplifier with Fiber

Description

XFM50-DVDA-F1X1N is a digital distribution amplifier module for all SDI video signals up to 3Gbit/s with one input and up to 16 outputs, depending on selected I/O panel.

A maximum of four Fiber connections are available through SFP modules, configurable as four outputs or one input and three outputs.

Supported Signals

The XFM50-DVDA-F1X1N module supports the following signals:

- SD SDI
- HD SDI
- 3G HD SDI
- Fiber (depending on selected SFP module)

Processing and Control

Cable equalization compensates for up to 350m of cable length (depending on used SDI format).

Format detection and monitoring of input signal is supported.

The module fully integrates into SNMP and ICONN environment.

Output Setup

Four different I/O Panel are available for XFM50-DVDA-F1X1N module:

- XFM50-DVDA-F1X1N-S with Standard BNC and SFP
- XFM50-DVDA-F1X1N-SB with Standard BNC, SFP and one bypass output
- XFM50-DVDA-F1X1N-H with HD-BNC¹ and SFP
- XFM50-DVDA-F1X1N-HB with HD-BNC¹, SFP and one bypass output

Test signal generator (optional)

An internal test signal generator with standard patterns like Color Bars is available as option. This eases wire tests, especially in complex infrastructures.

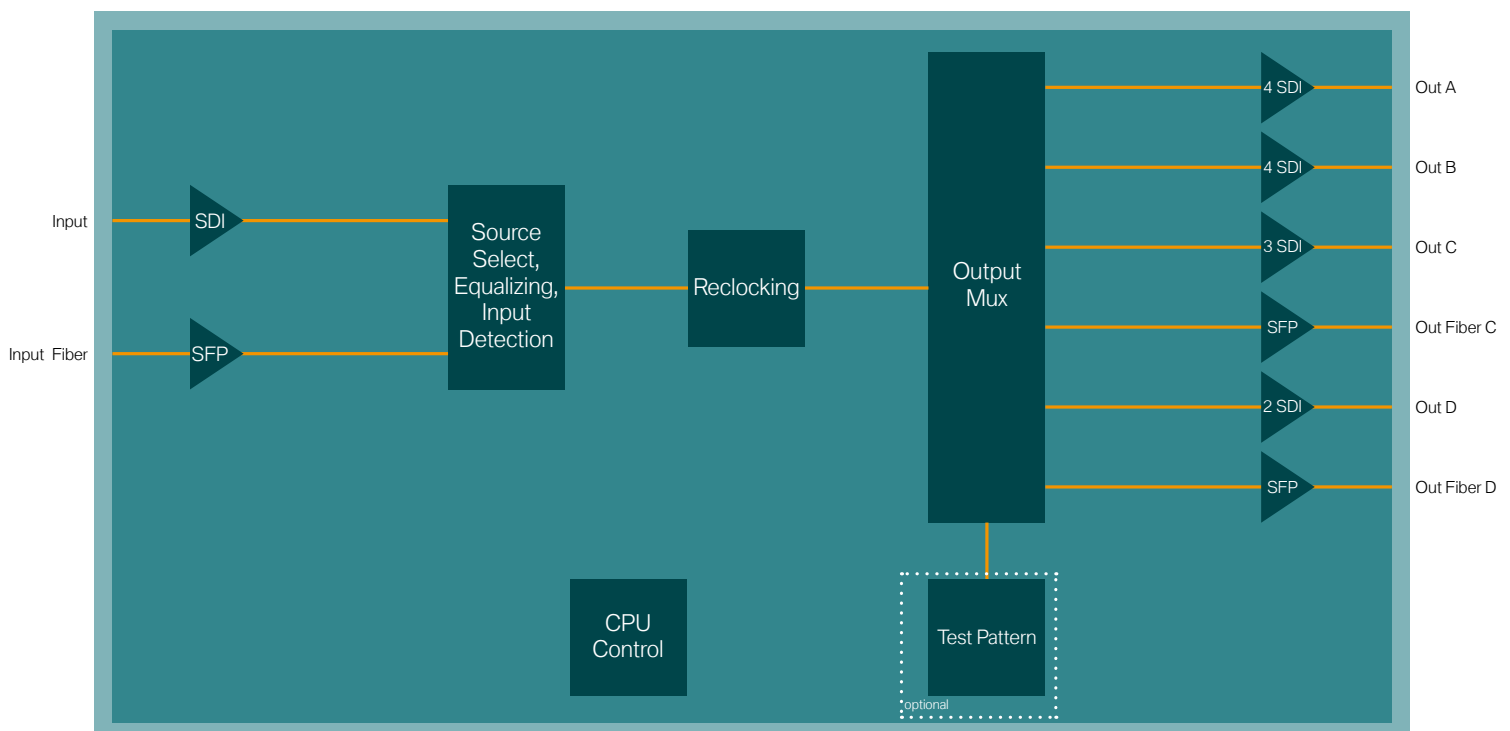
I/O Configuration

Outputs are organized in groups (see block diagram). Each group is assigned to the input or the optional test signal generator.

First Fiber / SFP port is configurable as input or output port.

All modules are configured via CDesk remote control software, local or LAN panel. The configuration is stored on the modules for standalone operation.

Functional Blockdiagram



¹ HD-BNC connectors such as Amphenol part No. 034-1017-300

SDI - Input

No. of Inputs

with XFM50-DVDA-F1X1N-S	1 BNC 1 Fiber (SFP)
with XFM50-DVDA-F1X1N-SB	1 BNC 1 Fiber (SFP)
with XFM50-DVDA-F1X1N-H	1 HD-BNC 1 Fiber (SFP)
with XFM50-DVDA-F1X1N-HB	1 HD-BNC 1 Fiber (SFP)

Signal Type SMPTE 259M, 292M, 424M
270 MHz SDI,
1.485 GHz SDI,
2.97 GHz SDI

Signal Level 800 mV

Impedance 75 Ohm

Return loss >15 dB at 1.485 GHz
>10 dB at 2.97 GHz

Equalizer 120m cable length (SMPTE 424M)
180m cable length (SMPTE 292M)
350m cable length (SMPTE 259M)

Format detection available via SNMP / ICONN

SFP

Compatible Modules

Port 1	Receiver, Dual Receiver (only first input useable), Transceiver, Transmitter, Dual Transmitter
Port 2	Transmitter, Dual Transmitter

Settings

Configuration memory 8 global settings

SDI - Output

No. of Outputs

with XFM50-DVDA-F1X1N-S	8 BNC 4 Fiber (SFP)
with XFM50-DVDA-F1X1N-SB	8 BNC 4 Fiber (SFP) with 1 Bypass Output
with XFM50-DVDA-F1X1N-H	13 HD-BNC 4 Fiber (SFP)
with XFM50-DVDA-F1X1N-HB	13 HD-BNC 4 Fiber (SFP) with 1 Bypass Output

Signal Type SMPTE 259M, 292M, 424M
270 MHz SDI,
1.485 GHz SDI,
2.97 GHz SDI

Signal Level 800 mV

Impedance 75 Ohm

Return loss >15 dB at 1.485 GHz
>10 dB at 2.97 GHz

Jitter < 0.1 UI for SMPTE 259M
< 0.15 UI for SMPTE 292M
< 0.25 UI for SMPTE 424M

GPI

Connector 8-pin Terminal Block

No. of Inputs 2

No. of Outputs 2

Physical

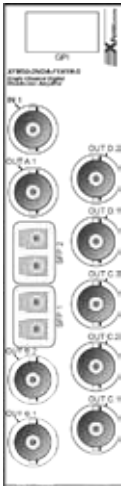
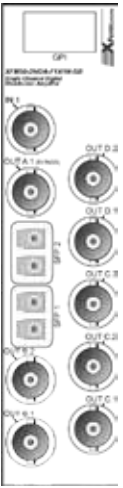
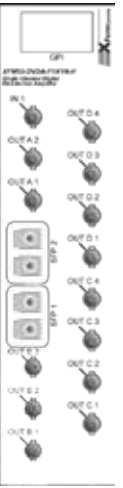
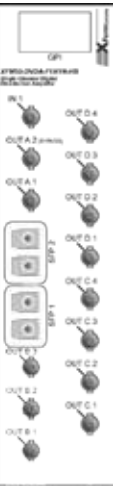
Temperature 0°C - 35°C (operation)

-20°C - 75°C (storage)

Humidity 10% - 90% non condensing

Power Requirements 3.5 Watts

Available I/O Panels

Name	XFM50-DVDA-F1X1N-S	XFM50-DVDA-F1X1N-SB	XFM50-DVDA-F1X1N-H	XFM50-DVDA-F1X1N-HB
Layout				
Inputs	1 BNC, 1 Fiber (SFP)	1 BNC, 1 Fiber (SFP)	1 HD-BNC, 1 Fiber (SFP)	1 HD-BNC, 1 Fiber (SFP)
Total Outputs	8 BNC, 4 Fiber (SFP)	8 BNC, 4 Fiber (SFP)	13 HD-BNC, 4 Fiber (SFP)	13 HD-BNC, 4 Fiber (SFP)
Bypass Outputs	no	1 BNC	no	1 HD-BNC

